

AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended)

A catalyst comprising palladium, at least one alkali metal compound and, optionally, at least one promoter on a porous support, obtained by the steps consisting essentially of loading the porous support, with at least one palladium compound which support comprises TiO₂ produced through the flame hydrolysis of TiCl₄, reducing the loading support, ~~subsequently carrying out reduction~~ at a temperature of 300 - 500°C and ~~additionally then~~ applying at least one alkali metal compound and, optionally, at least one promoter before or after the reduction.

Claim 2 (previously presented)

A catalyst of claim 1 which comprises at least one potassium compound.

Claim 3 (previously presented)

A catalyst of claim 1 which additionally comprises at least one member of the group consisting of Au, Ba, Cd and their compounds as promoter.

Claim 4 (cancelled)

Claim 5 (previously amended)

A catalyst of claim 1, wherein the reduction is carried out for 1 minute to 24 hours.

Claim 6 (previously presented)

A catalyst of claim 1, wherein the reduction is carried out using gaseous or vaporizable reducing agents.

Claim 7 (previously presented)

A catalyst of claim 1, wherein the reducing agent for the reduction is at least one member selected from the group consisting of H₂, CO, ethylene, NH₃, formaldehyde, methanol, hydrocarbons and mixtures of these reducing agents with inert gases.

Claim 8 (currently amended)

A process for producing a catalyst of claim 1, comprising the steps consisting essentially of loading the porous support with at least one palladium compound, which support comprises TiO₂ produced through the flame hydrolysis of TiCl₄, ~~subsequently carrying out reduction~~ reducing the loaded support at a temperature of 300 - ~~500~~ 600°C and ~~additionally then~~ applying at least one alkali metal compound and, optionally, at least one promoter before or after the reduction.

Claim 9 (previously presented)

The process of claim 8, wherein the catalyst comprises at least one potassium compound.

Claim 10 (previously presented)

The process of claim 8, wherein the catalyst additionally comprises at least one member of the group consisting of Au, Ba, Cd and their compounds as promoters.

Claim 11 (cancelled)

Claim 12 (previously presented)

The process of claim 8, wherein the reduction is carried out from 1 minute to 24 hours.

Claim 13 (previously presented)

The process of claim 8, wherein the reduction is carried out using gaseous or vaporizable reducing agents.

Claim 14 (previously presented)

The process of claim 8, wherein the reducing agent for the reduction is at least one member selected from the group consisting of H₂, CO, ethylene, NH₃, formaldehyde, methanol, hydrocarbons and mixtures of these reducing agents with inert gases.

Claim 15 (cancelled)

Claim 16 (previously presented)

In a process for the preparation of vinyl acetate from the gaseous phase reaction of ethylene, acetic acid and oxygen or oxygen containing gas, the improvement comprising using as catalyst the catalyst of claim 1.